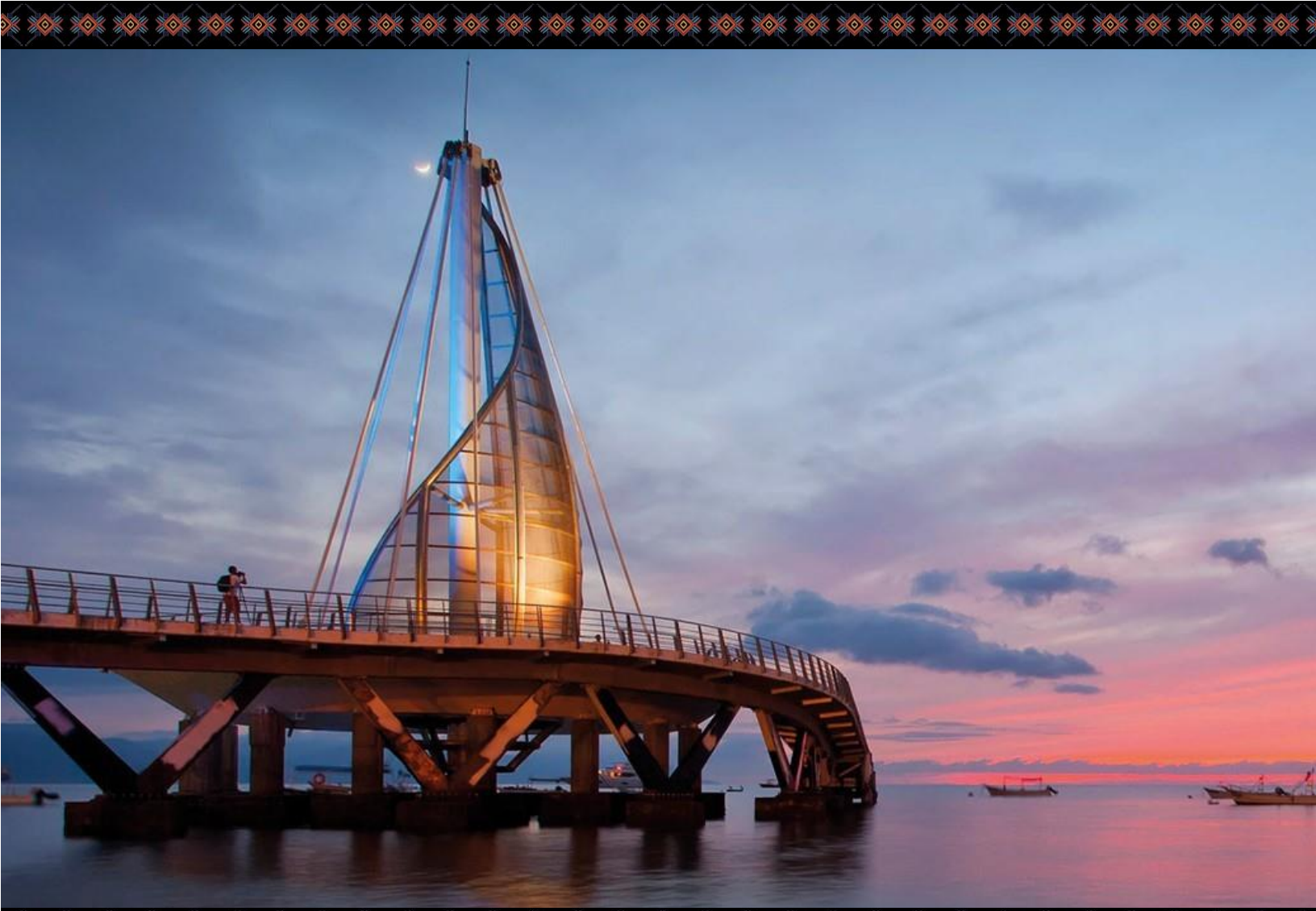




ISFNF 2024

International Symposium on Fish Nutrition and Feeding



Scientific Program



Local Organizing Committee

Dr. Mayra L. González-Félix, University of Sonora, Mexico, Chair

Dr. Martin Perez-Velazquez, University of Sonora, Mexico

Dr. L. Elizabeth Cruz-Suárez, Autonomous University of Nuevo Leon, Mexico

Dr. Maria Teresa Viana, Autonomous University of Baja California, Mexico

Dr. Juan Pablo Lazo, Center for Scientific Research and Higher Education of Ensenada, Mexico

International Scientific Committee

Prof. Brett Glencross, University of Stirling, United Kingdom, Chair

Prof. Delbert Gatlin III, Texas A&M University, United States of America

Prof. Luisa Valente, University of Porto, Portugal

Prof. Shuichi Satoh, Tokyo University of Fisheries, Japan

Prof. Marisol Izquierdo, University of Las Palmas de Gran Canaria, Spain

Prof. Seunghyung Lee, Pukyong National University, South Korea

Prof. Kangsen Mai, Ocean University of Qingdao, China

Local Scientific Committee ISFNF 2024

Dr. Mayra L. González-Félix, University of Sonora, Mexico, Chair

Dr. Martin Perez-Velazquez, University of Sonora, Mexico

Dr. L. Elizabeth Cruz-Suárez, Autonomous University of Nuevo Leon, Mexico

Dr. Maria Teresa Viana, Autonomous University of Baja California, Mexico

Dr. Juan Pablo Lazo, Center for Scientific Research and Higher Education of Ensenada, Mexico

Dr. Vikas Kumar, University of Idaho, United States of America

Dr. Denis R.M. Ricque Marie, Autonomous University of Nuevo Leon, Mexico

Dr. Carlos Alfonso Álvarez-González, Juárez Autonomous University of Tabasco, Mexico

Dr. Uriel Rodríguez-Estrada, Juárez Autonomous University of Tabasco, Mexico

Dr. Dariel Tovar-Ramírez, Center for Biological Research of the Northwest, Mexico

Dr. Alberto Peña-Rodríguez, Center for Biological Research of the Northwest, Mexico

Dr. Luis Héctor, Hernández-Hernández, National Autonomous University of Mexico



OUR ESTEEMED SPONSORS



dsm-firmenich 



GOLD SPONSOR

dsm-firmenich

As innovators in nutrition, health, and beauty, **dsm-firmenich** reinvents, manufactures, and combines vital nutrients, flavors, and fragrances for the world's growing population to thrive. With our comprehensive range of solutions, with natural and renewable ingredients and renowned science and technology capabilities, we work to create what is essential for life, desirable for consumers, and more sustainable for the planet. **dsm-firmenich** is a Swiss-Dutch company, listed on the Euronext Amsterdam, with operations in almost 60 countries and revenues of more than €12 billion. With a diverse, worldwide team of nearly 30,000 employees, we bring progress to life™ every day, everywhere, for billions of people.

www.dsm-firmenich.com



From exposed to protected

In aquaculture, fish and shrimp are constantly exposed to pathogen pressures, environmental fluctuations and other production stressors, negatively impacting survival and productivity.

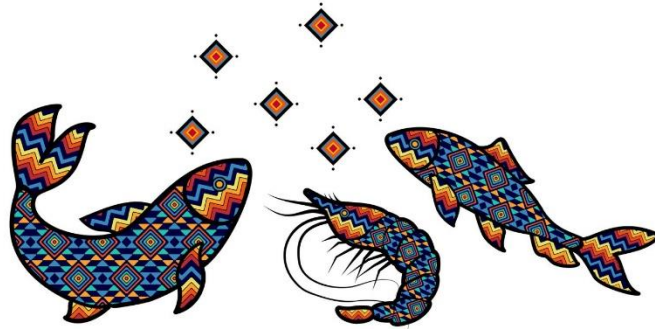
At dsm-firmenich, we offer solutions to protect aquatic animals, reducing the risk of health and welfare challenges throughout the production cycle.

Learn more at
dsm-firmenich.com/anh



We bring progress to life

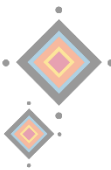
OUR ESTEEMED SPONSORS



ISFNF 2024
International Symposium on Fish Nutrition and Feeding



NORTH AMERICAN RENDERERS ASSOCIATION
Reclaiming Resources, Sustainably



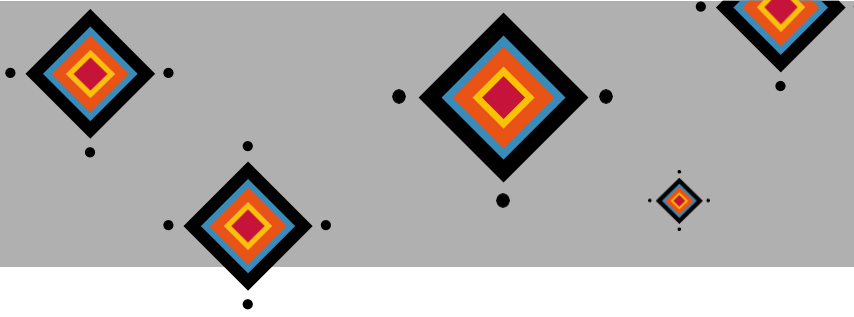
OUR ESTEEMED SPONSORS



OUR MEDIA PARTNERS



Monday May 27



ISFNF 2024

International Symposium on Fish Nutrition and Feeding

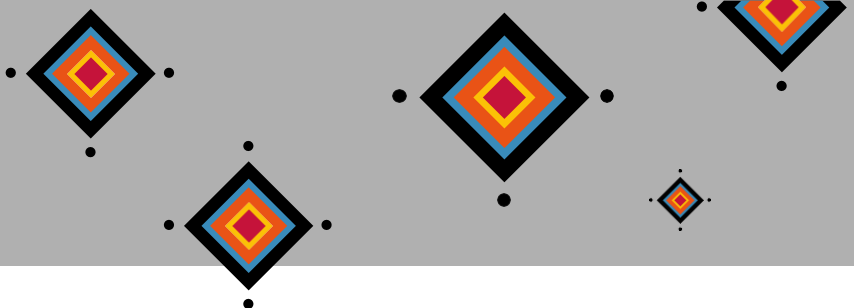
09:00 - 14:00 **REGISTRATION AND POSTER SET UP**

14:00 - 18:00 **REGISTRATION AND POSTER SET UP**

18:00 - 19:00 **POSTER SESSION 1**

20:00 - 22:00 **WELCOME RECEPTION**

Tuesday May 28



08:20 - 08:50 **OPENING CEREMONY**

09:00 - 09:30 **KEYNOTE LECTURE 1:**

PROTEIN AND OIL SOURCES FROM CIRCULAR ECONOMY. Valente L.

2

09:40 - 11:20

SESSION 1. PROTEIN SOURCES

Chairs: Maria Teresa Viana and Margareth Øverland

- | | | |
|-------|--|---|
| 09:40 | A SELECTIVELY BRED HIPRO SOYA WITH REDUCED ANTINUTRIENTS AND INCREASED PROTEIN CONTENT IMPROVES PERFORMANCE OF ATLANTIC SALMON (<i>Salmo salar</i>). Zatti KM. | 3 |
| 10:00 | BEYOND NUTRITIONAL VALUE: MYCOPROTEIN <i>Paecilomyces variotii</i> IMPROVES GROWTH PERFORMANCE AND OVERALL HEALTH IN ATLANTIC SALMON (<i>Salmo salar</i>). Mensah DD. | 4 |
| 10:20 | NOVEL MICROBIAL PROTEIN SOURCES PRODUCED FROM FOREST SIDE STREAMS SUPPORT HIGH GROWTH PERFORMANCE, HEALTH, AND PRODUCT QUALITY OF ATLANTIC SALMON. Øverland M. | 5 |
| 10:40 | USE OF BLACK SOLDIER FLY LARVAE BY-PRODUCTS IN TILAPIA AND CATFISH NUTRITION. Romano NR. | 6 |
| 11:00 | ALTERNATIVE SALMON FEEDS DESIGNED FOR RECIRCULATING AQUACULTURE SYSTEMS USING REGENERATIVE NUTRITIONAL FEEDSTUFFS SOURCED FROM THE LOCAL CIRCULAR BIOECONOMY IN NOVA SCOTIA, CANADA. Colombo SM. | 7 |

11:20 - 12:00 **Coffee Break**

12:00 - 14:00

SESSION 2. PROTEIN SOURCES

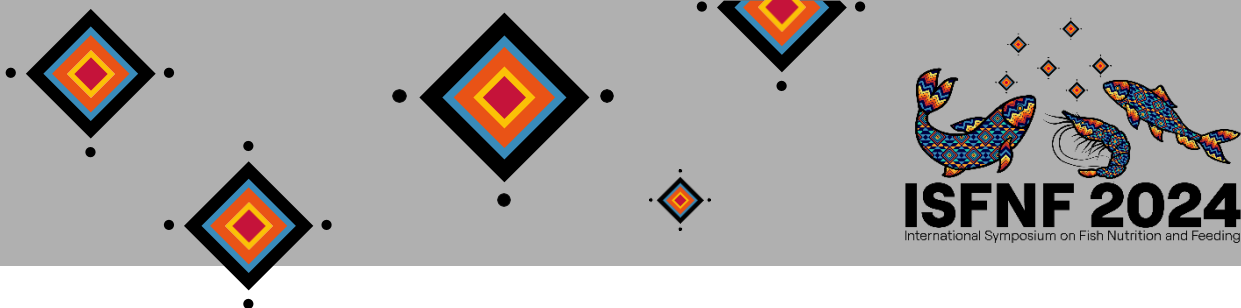
Chairs: Juan Pablo Lazo and Alberto Nunes

- | | | |
|-------|--|----|
| 12:00 | THE EFFECTS OF DIFFERENT SOYBEAN PROTEIN SOURCES ON GROWTH PERFORMANCE, FEED UTILIZATION EFFICIENCY, INTESTINE HISTOLOGY, AND GENE EXPRESSION OF PACIFIC WHITE SHRIMP (<i>Litopenaeus vannamei</i>). Davis DA. | 8 |
| 12:20 | FEEDING THE GILTHEAD SEA BREAM OF THE FUTURE: TOWARDS SUSTAINABLE AQUAFEEDS WITH SINGLE CELL PROTEINS. Bonaldo A. | 9 |
| 12:40 | KRILL MEAL REDUCES SEA LICE INFESTATION AND ENHANCES SKIN MUCOSAL HEALTH IN ATLANTIC SALMON. Kaur K. | 10 |
| 13:00 | THE NOVEL RAW MATERIAL <i>Calanus finmarchicus</i> IS A SOURCE OF PROTEIN PRODUCTS FOR WHITELEG SHRIMP (<i>Litopenaeus vannamei</i>). Abrahamsen H. | 11 |
| 13:20 | <i>Paecilomyces variotii</i> (PEKILO®) IN NOVEL FEEDS FOR ATLANTIC SALMON: EFFECTS ON PELLET QUALITY, GROWTH PERFORMANCE, GUT HEALTH, AND NUTRIENT DIGESTIBILITY AND UTILIZATION. Hooft JM. | 12 |
| 13:40 | DEVELOPMENT OF NON-FISH MEAL/NON-FISH OIL DIET FOR YELLOWTAIL <i>Seriola quinqueradiata</i> WITH MICRO ALGAE AND FEED STIMULANTS. Satoh S. | 13 |

14:00 - 15:20 **LUNCH**

Tuesday May 28

Wednesday May 29



15:20 - 17:20

SESSION 3. LIPID SOURCES

Chairs: Mayra González-Félix and Brett Glencross

15:20	THE EFFECT OF USING A NEREID POLYCHAETE AS AN ALTERNATIVE PROTEIN AND LIPID SOURCE IN DIETS FOR RED SEABREAM <i>Pagrus major</i> . Kabeya N.	14
15:40	ASSESSING THE STRUCTURAL COMPOSITION OF LIPIDS WITHIN ALTERNATIVE OILS: ARE LIPIDS MORE THAN JUST THE SUM OF THEIR FATTY ACIDS? Broughton R.	15
16:00	EFFECT OF DIFFERENT LEVELS OF DOCOSAHEXAENOIC ACID IN DIETS FOR MARKET SIZE OF ASIAN SEABASS <i>Lates calcarifer</i> , AND PERSISTENCE OF DHA IN BLOOD AND FLESH. Haga Y.	16
16:20	EFFECTS OF VARYING EPA/DHA RATIOS AND TOTAL EPA+DHA INCORPORATION IN SEA BASS AND SEA BREAM DIETS THROUGH ALGAL DHA SUPPLEMENTATION. Karalazos V.	17
16:40	INCLUSION OF EPA AND DHA-RICH OIL FROM TRANSGENIC <i>Camelina sativa</i> IN FEED FOR ATLANTIC SALMON (<i>Salmo salar</i>) GROWN TO MARKET SIZE IN SEAWATER PENS. Betancor MB.	18
17:00	REPLACEMENT OF FISH OIL BY A HIGH-DHA MICROBIAL OIL IN SALMON DIETS: EFFECT ON LIPID MOLECULAR SPECIES AND GENE EXPRESSION. Parrish CC.	19
18:00 - 19:00	POSTER SESSION 2	

09:00 - 09:30 KEYNOTE LECTURE 2:

OPTIMIZING FISH DIETS: A COMPREHENSIVE REVIEW OF NUTRITIONAL REQUIREMENTS. Oliva-Teles A. 20

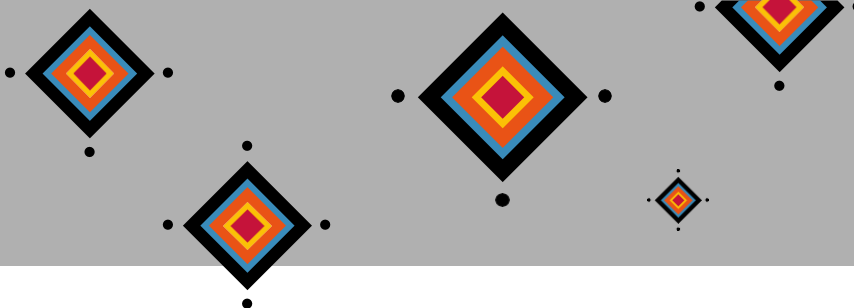
09:40 - 11:20

SESSION 4. NUTRIENTS AND FUNCTIONALITY

Chairs: Ruth Montero and Shuichi Satoh

09:40	A METHIONINE AS A NUTRACEUTICAL INGREDIENT FOR THE EUROPEAN SEABASS. Machado M.	21
10:00	FROM IMMUNE TO NEUROENDOCRINE MODULATION - AN INTEGRATIVE VIEW OF TRYPTOPHAN AS A FEED ADDITIVE TO PROMOTE FISH WELFARE. Azeredo R.	22
10:20	METABOLIC RESPONSES OF YELLOW PERCH (<i>Perca flavescens</i>) TO DIETARY CARBOHYDRATE SOURCES AND LEVELS. Deng DF.	23
10:40	EFFECT OF CARBOHYDRATE TYPE (DEXTRIN, RAW STARCH, AND GELATINIZED STARCH) ON GROWTH, FEED EFFICIENCY, GLYCEMIC RESPONSE, AND DIGESTIVE CAPACITY OF <i>Morone saxatilis</i> CULTURED AT TWO TEMPERATURES IN SEAWATER. Garnica-Gómez LA.	24
11:00	THE DEVELOPMENT OF FEEDING BEHAVIOR, APPETITE AND SATIETY REGULATION IN GILTHEAD SEABREAM (<i>Sparus aurata</i>) LARVAE. Bitan A.	25

11:20 - 12:00 **Coffee Break**



12:00 - 14:00

SESSION 5. COMPARATIVE NUTRITION

Chairs: Artur Rombenso and Aires Oliva-Teles

12:00	COMPARATIVE STUDY OF N-3 PUFA UTILIZATION IN RAINBOW TROUT AND ATLANTIC SALMON. Bou M.	26
12:20	OPTIMUM VITAMIN NUTRITION AND CALCIFEDIOL IMPROVE PERFORMANCE OF WHITELEG SHRIMP (<i>Litopenaeus vannamei</i>) AND RAINBOW TROUT (<i>Oncorhynchus mykiss</i>). Liu A.	27
12:40	USING FACTORIAL MODELS AND THE IDEAL PROTEIN CONCEPT TO DESIGN CRUSTACEAN FORMULATED FEEDS. Yeap A.	28
13:00	UNDERSTANDING FEED TYPES, INTAKE AND FEEDING BEHAVIOUR IN FEMALE BROODSTOCK <i>Penaeus monodon</i> : EFFECTS ON GROWTH, TISSUE COMPOSITION AND METABOLOMICS, AND REPRODUCTIVE PERFORMANCE. Rombenso A.	29
13:20	DIFFERENT RATIOS OF DIGESTIBLE MACRONUTRIENTS AFFECTED PERFORMANCE DIFFERENTLY IN RAINBOW TROUT AT OPTIMAL CONDITIONS. Sixten HJ.	30
13:40	LYSO-PHOSPHOLIPID SUPPLEMENTATION AS STRATEGY TO REPLACE LECITHIN AND REDUCE COST OF SHRIMP FEEDS. Nuez-Ortín WG.	31

14:00 - 15:20 **LUNCH**

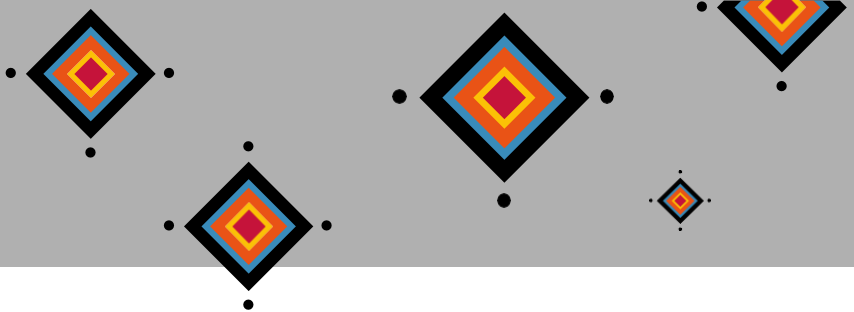
15:20 - 17:20

SESSION 6. ENVIRONMENT AND NUTRITION

Chairs: Martin Perez-Velazquez and Naoki Kabeya

15:20	IMPACTS OF MACRONUTRIENT COMPOSITION ON ATLANTIC SALMON AT HIGH TEMPERATURES. Simon C.	32
15:40	EFFECT OF DIETARY TAURINE, CHOLESTEROL AND CHOLIC ACID ON ASTAXANTHIN DIGESTIBILITY AND DEPOSITION IN ATLANTIC SALMON (<i>Salmo salar</i>) REARED AT ELEVATED TEMPERATURE. Courtot E.	33
16:00	UNDERSTANDING THE IMPACTS OF THERMAL STRESS IN SALMON TISSUES USING PROTEOMICS AND METABOLOMICS. Mendoza-Porras O.	34
16:20	TRANSCRIPTOMICS REVEALS THE BIOLOGICAL MECHANISMS UNDERLYING THE IMPACT OF TRYPTOPHAN SUPPLEMENTATION IN FISH UNDER STRESSFUL CONDITIONS. Peixoto D.	35
16:40	COMPENSATORY GROWTH IN PACIFIC WHITE SHRIMP (<i>Penaeus vannamei</i>): FEEDING STRATEGIES, OXIDATIVE STRESS AND REARING IMPROVEMENT. Py C.	36
17:00	NILE TILAPIA JUVENILES REARED AT COLD SUBOPTIMAL WATER TEMPERATURES DO NOT BENEFIT FROM DIETARY SUPPLEMENTATION WITH CHOLESTEROL. Fracalossi DM.	37

18:00 - 19:00 **POSTER SESSION 3**



09:00 - 09:30 KEYNOTE LECTURE 3

A COMPLEX NEW WORLD FOR INGREDIETS IN AQUACULTURE.
Manomaitis L.

38

09:40 -11:20

SESSION 7. HEALTH

Chairs: Delbert M. Gatlin and Stefanie Colombo

09:40	FUCOIDAN FROM SUGAR KELP TO COORDINATE THE IMMUNE RESPONSE AND INTESTINAL MICROBIOTA IN ATLANTIC SALMON BY NUTRITIONAL PROGRAMMING. Rocha S.	39
10:00	OXYTETRACYCLINE DOSE REDUCTION IN SALMON FARMING: ASSESSING A MICRO ENCAPSULATED NOVEL FORMULATION IN AN IN VIVO MODEL. Wacyk J.	40
10:20	THE EFFECTS OF GLYCINE SUPPLEMENTATION IN SOYBEAN-MEAL-BASED DIETS AS A FUNCTIONAL AMINO ACID FOR JUVENILE HYBRID STRIPED BASS (<i>Morone chrysops</i> x <i>M. saxatilis</i>). Suehs BA.	41
10:40	IMPACT OF NOVEL OMEGA-3 LONG-CHAIN POLYUNSATURATED FATTY ACIDS-RICH OILS ON ATLANTIC SALMON, <i>Salmo salar</i> , HEALTH: SEA-LICE CHALLENGE. Salah AS.	42
11:00	A NOVEL SOLUTION TO COMBAT <i>Piscirickettsia salmonis</i> , THE CAUSATIVE AGENT OF SALMON RICKETTSIAL SEPTICAEMIA (SRS). Standen B.	43

11:20 -12:00 Coffee Break

12:00 - 14:00

SESSION 8. NUTRITIONAL FRONTIERS

Chairs: Débora Machado Fracalossi and Monica Betancor

12:00	THE DEVELOPMENT OF METHODOLOGICAL APPROACHES AND DIGITAL TOOLS ENABLING EFFECTIVE ASSESSMENT OF FEED QUALITY AND THE EFFECTIVENESS NUTRITIONAL SOLUTIONS UNDER FIELD CONDITIONS. Bureau DP.	44
12:20	A RAINBOW TROUT (<i>Oncorhynchus mykiss</i>) ARTIFICIAL INTESTINE PLATFORM TO DISCRIMINATE BETWEEN CONTRASTING DIETS. Chacon MA.	45
12:40	OPTIMISING THE INCLUSION OF PROTEIN SOURCES IN DIETS FOR <i>Penaeus vannamei</i> USING A GEOMETRIC FRAMEWORK. Truong HH.	46
13:00	MACHINE LEARNING MODELS FOR REAL-TIME DISSOLVE OXYGEN AND TEMPERATURE PREDICTION IN FISH PONDS. Alaa J.	47
13:20	A NOVEL FEEDING STRATEGY BASED ON MUSCLE FIBER RECRUITMENT TO MAXIMIZE THE PERFORMANCE OF RAINBOW TROUT. Kumar V.	48
13:40	CARBON FOOTPRINT OF SALMON FEED: EFFECTS OF INCLUDING ALGAE. Jafarzadeh S.	49

09:00 - 09:30 KEYNOTE LECTURE 4

ECONOMIC AND SOCIETAL CHANGES THAT SHAPE OUR INDUSTRY; PAST, PRESENT AND FUTURE. Santigosa E.

50

09:40 - 11:20

SESSION 9. ADDITIVES

Chairs: Sergio Rocha and Dave Francis

09:40 POSITIVE EFFECT OF MARINE SYMBIOTICS SUPPLEMENTATION ON FISH INTESTINAL MICROBIOTA DYSBIOSIS INDUCED BY ANTIBIOTIC TREATMENT. Giudicelli F.

51

10:00 FUCOIDAN FROM SUGAR KELP AS A FEED ADDITIVE TO IMPROVE TRAINED IMMUNITY-BASED VACCINE IN ATLANTIC SALMON AGAINST *Tenacibaculum maritimum*. Morales-Lange.

52

10:20 NUTRITIONAL STRATEGY COMBINING SATURATED LIPID SOURCES AND SUPPLEMENTATION WITH SPICES TO MITIGATE IMPACTS OF FISH OIL REDUCTION IN FISH FEEDS. Morais S.

53

10:40 IMMUNOMODULATORY EFFECTS OF LAMINARIN FROM *Laminaria hyperborea* ON ATLANTIC SALMON LEUKOCYTES- FIRST STEPS TOWARDS NOVEL FUNCTIONAL FEED APPLICATION FOR SALMON. Montero R.

54

11:00 ARE WE LEVERAGING THE FULL FUNCTIONALITY OF THE VITAMIN D SYSTEM? Rider S.

55

11:20 - 12:00 Coffee Break

12:00 - 14:00

SESSION 10. ADDITIVES

Chairs: Sofia Morais and Ha Truong

12:00 HOST-MICROBIOTA INTERACTIONS DRIVE THE PROBIOTICS ENRICHMENT IN THE MICROBIOTA OF *L. vannamei*: A HOLOGENOME PERSPECTIVE. Cornejo-Granados.

56

12:20 EFFECT OF DIETARY CHOLINE ON ENERGY FORTIFICATION IN ATLANTIC SALMON (*Salmo salar* L.). Yang BC.

57

12:40 MARINE INGREDIENTS AS ANTI-INFLAMMATORY FEED ADDITIVES: IN VITRO ASSESSMENT USING A CELL-BASED ASSAY AND IN VIVO RESULTS USING *Aurantiochytrium* sp. MEAL. Hoffling FB.

58

13:00 OPTIMAL IMMUNE FUNCTION IN FISH REQUIRES OPTIMAL MICRONUTRIENT SUPPLY. Kortner TM.

59

13:20 VITAMIN AND MINERAL REQUIREMENTS FOR OPTIMAL DISEASE RESISTANCE. A REVIEW. Krogdahl A.

60

13:40 DIETARY SUPPLEMENTATION OF EXOGENOUS PROTEASES IMPROVES PROTEIN AND AMINO ACID DIGESTIBILITY AND GROWTH PERFORMANCE OF JUVENILE *Penaeus vannamei*. Nunes AJP.

61

14:00 - 15:20 LUNCH

Friday May 31

15:20 - 17:20

SESSION 11. ADDITIVES

Chairs: Elizabeth Cruz-Suárez and Luisa Valente

15:20	FUNCTIONAL AMINO ACIDS FOR NILE TILAPIA: A DOSE-RESPONSE STUDY FOR IMPROVING GROWTH AND HEALTH. Pereira RT.	62
15:40	EVALUATION OF SINGLE AND COMPLEXED EXOGENOUS ENZYME SUPPLEMENTATION IN PLANT-BASED HYBRID ABALONE DIETS. Salini MJ.	63
16:00	MUCOSAL BIOMARKERS IN SALMON HEALTH DIAGNOSTICS: EVALUATING STRESS AND FUNCTIONAL INGREDIENTS. Djordjevic B.	64
16:20	CHROMIUM METHIONINE SUPPLEMENTATION IMPROVES CARBOHYDRATE UTILIZATION, PROTEIN RETENTION AND OVERALL PERFORMANCE OF RAINBOW TROUT. Moffitt MK.	65
16:40	COMPARATIVE STUDY OF NATURAL AND SYNTHETIC ASTAXANTHIN PIGMENTS FOR ENVIRONMENTALLY SUSTAINABLE AQUACULTURE PRACTICES. Vitale M.	66
17:00	DIVING INTO THE EFFECTS OF <i>Salicornia ramosissima</i> DERIVED COMPOUNDS ON SHRIMP GUT HEALTH. Garcia A.	67

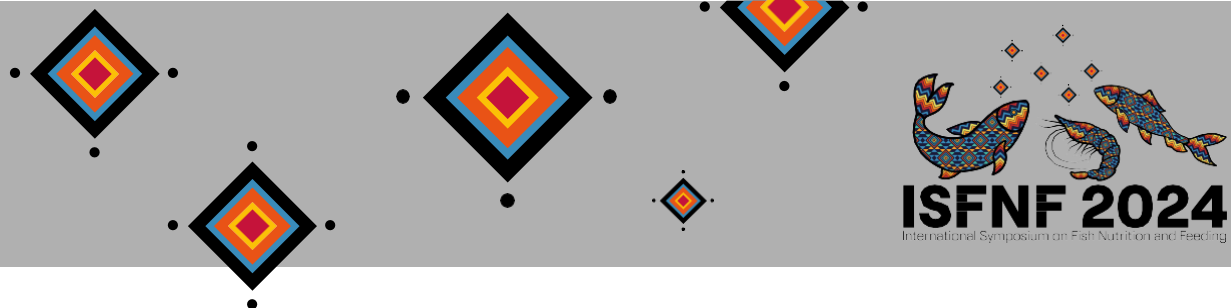
17:20 - 18:00 **AWARDS AND CLOSING CEREMONY**

19:00 - 22:00 **SYMPOSIUM DINNER**

Friday May 31

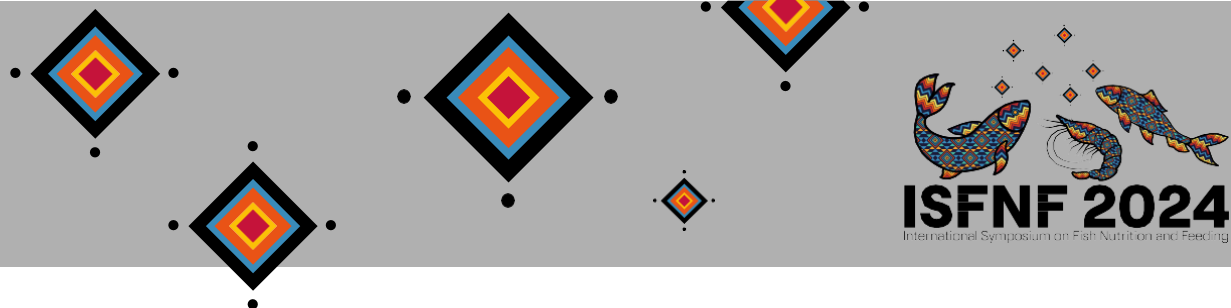
Poster Presentations

Abstract ID	Title	Main autor/ page
14	DIGESTIBILITY OF FISHMEALS WHEN FED TO ATLANTIC SALMON (<i>Salmo salar</i>) CAN BE PREDICTED BY NEAR INFRARED (NIR) SPECTROSCOPY	Glencross BD* 69
16	ASSESSING THE RATE OF CHANGE IN THE FILLET FATTY ACID PROFILE OF <i>Oreochromis niloticus</i> TO ATTAIN A NUTRACEUTICAL LEVEL OF DHA + EPA	González-Félix ML* 70
19	THE EFFECT OF PROTEIN TO LIPID RATIOS ON GROWTH, DIGESTIBILITY, AND FEED UTILIZATION OF STRIPED BASS (<i>Morone saxatilis</i>) RAISED IN SEAWATER AT 21°C	Noguera ER* 71
25	EFFECTS OF A FUNCTIONAL PALATABILITY ENHANCER IN IMPROVING WHITELEG SHRIMP (<i>Litopenaeus vannamei</i>) PERFORMANCE UNDER CHRONIC HIGH SALINITY STRESS	Hernández C* 72
26	BACTERIAL-BASED SINGLE CELL PROTEIN AS FISHMEAL REPLACEMENT IN DIETS FOR NILE TILAPIA FRY	Perez-Velazquez M* 73
27	INITIAL STUDIES OF CAPTIVE BREEDING OF <i>Chromis limbaughi</i> AND <i>Opistognathus rosenblatti</i> : CONTRIBUTING TO THEIR CONSERVATION AND SUSTAINABLE PRODUCTION	Félix-Berumen RD* 74
29	ALLPRO DIETARY SUPPLEMENTATION FOR ONLY 30 DAYS AT 22°C INCREASED DHA IN NILE TILAPIA FILLETS AT SATISFACTORY LEVELS FOR HUMAN CONSUMPTION, WITHOUT AFFECTING FILLET QUALITY OR SHELF LIFE	Fracalossi DM* 75
32	USE OF PASSIVE ACOUSTIC MONITORING TO EVALUATE THE EFFECTS OF A FEED EFFECTOR ON FEEDING BEHAVIOR, GROWTH PERFORMANCE, AND SALINITY STRESS TOLERANCE OF <i>Litopenaeus vannamei</i>	Davis DA* 76
33	IMPROVING THE FEED EFFICIENCY OF PLANT PROTEIN BASED DIETS THROUGH NUTRITIONAL AND GENETIC APPROACHES IN RAINBOW TROUT	Kumar V* 77
35	<i>Lactobacillus rhamnosus</i> GG TRIGGERS INTESTINAL EPITHELIUM INJURY IN ZEBRAFISH REVEALING HOST DEPENDENT BENEFICIAL EFFECTS	Zhang* 78
38	NUTRITIONAL VALUE OF AUTOCHTHONOUS BREADNUT, <i>Brosimum alicastrum</i> , SEEDS MEAL, AS FEED INGREDIENT IN NILE TILAPIA, <i>Oreochromis niloticus</i> , FINGERLINGS, DIETS	Rodríguez-Estrada U* 79
39	GREEN SYNTHESIZED SILVER NANOPARTICLES AS FEED ADDITIVES TO ENHANCED THE IMMUNE RESPONSE IN <i>Penaeus vannamei</i>	Montoya-Mejía M* 80
40	DIETS WITH SILAGE OF FISHERY AND VEGETABLE BY-PRODUCTS IMPROVE THE PRODUCTIVE PERFORMANCE AND IMMUNE RESPONSE TO VPAHPND OF SHRIMP (<i>Penaeus vannamei</i>)	Montoya-Mejía M* 81
42	EFFECT OF KRILL MEAL ON THE REPRODUCTIVE PERFORMANCE OF BROODSTOCK NILE TILAPIA, <i>Oreochromis niloticus</i>	Kaur K* 82
43	EVALUATION OF TRACE MINERAL SOURCE AND CONCENTRATION ON GROWTH PERFORMANCE OF JUVENILE <i>Penaeus vannamei</i> FED 10 OR 5% FISHMEAL DIETS	Nunes AJP* 83
44	VALIDATION OF GUT TRANSIT RATE ASSESSMENT METHODOLOGY AND THE MITIGATION OF SAMPLING STRESS IN ATLANTIC SALMON, <i>Salmo salar</i>	Miles PC* 84

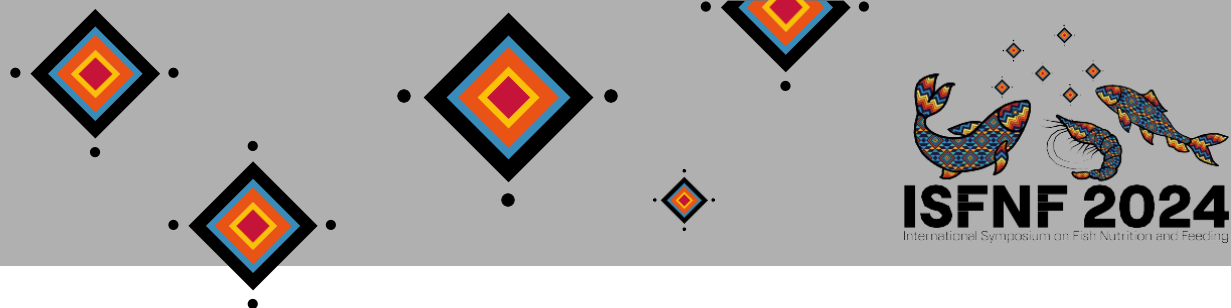


Abstract ID	Title	Main author/ page
47	DUAL FEEDING STRATEGIES ENHANCES THE GROWTH OF SHRIMP <i>Penaeus vannamei</i> WHEN FED HIGH INCLUSIONS OF MICROBIAL BIOMASS NOVAQPROTM	Truong HH* 85
54	ASSESSING THE NUTRITIONAL POTENTIAL OF A RANGE OF CIRCULAR FEED INGREDIENTS WHEN FED TO ATLANTIC SALMON (<i>Salmo salar</i>)	Glencross BD* 86
55	GLOBAL BY-PRODUCT MARINE INGREDIENTS: AN ANALYSIS OF VOLUMES AND ORIGINS	Glencross BD* 87
56	AN ASSESSMENT OF THE IMPACT OF INGREDIENT APPLICATION ON THE ENVIRONMENTAL FOOTPRINT OF AQUACULTURE FEEDS: A COMPARISON OF THREE AQUACULTURE FEED TYPES	Glencross BD* 88
58	BIOACTIVE COMPOUNDS FOR AQUACULTURE	Sánchez-Ortiz AC* 89
59	STATE OF AQUACULTURE IN JALISCO AND PROSPECTIVE STUDY FOR THE USE OF BIOTECHNOLOGICAL TOOLS FOR CULTURE IMPROVEMENTS	Sánchez-Ortiz AC* 90
60	EVALUATION OF CORN FERMENTED PROTEIN AS A REPLACEMENT FOR SOYBEAN MEAL IN THE DIET OF JUVENILE TILAPIA <i>Oreochromis niloticus</i>	Carvalho PLPF* 91
61	CAN ALGAE-SUPPLEMENTED FEEDS ENHANCE ROBUSTNESS IN SENEGALESE SOLE POSTLARVAE?	Engrola S* 92
62	OPTIMUM VITAMIN NUTRITION TO FOSTER SUSTAINABLE SHRIMP AQUACULTURE	Liu A* 93
63	EFFECTS OF PROBIOTICS ON GROWTH AND BIOLOGICAL PERFORMANCE OF LONG SNOUT SEAHORSE <i>Hippocampus reidi</i>	Peña R* 94
66	STRATEGIC USE OF CHOLESTEROL FOR ENERGY FORTIFICATION OF ATLANTIC SALMON (<i>Salmo salar</i> L)	Yang BC* 95
67	EXPLORING THE IMPACT OF BLACK SOLDIER FLY LARVAE MEAL GROWN ON DIFFERENT SUBSTRATES IN NILE TILAPIA AND CHANNEL CATFISH DIETS	Gatlin III DM* 96
68	HERBAL EXTRACT ADDITIVE IMPROVES LIVER HEALTH AND FILLET QUALITY OF COHO SALMON (<i>Oncorhynchus kisutch</i>)	Essmann MK* 97
69	SUPPLEMENTATION OF SINGLE CELL PROTEIN, SEA BEANS MEAL AND A COMBINATION OF ALTERNATIVE PROTEIN SOURCES TO REPLACE FISHMEAL PROTEIN IN THE DIETS OF JUVENILE BLACK SEA BASS <i>Centropristis striata</i>	Alam MS* 98
70	DEVELOPMENT OF STATISTICAL MODELS FOR PREDICTING FEED INTAKE IN THE ATLANTIC SALMON	Azevedo ML* 99
71	RAW MATERIAL PROCESSING OR DIETARY EXOGENOUS ENZYMES INCLUSION AFFECTS HEALTH PARAMETERS OF EUROPEAN SEABASS (<i>Dicentrarchus labrax</i>) WHEN FED PLANT MEAL BASED DIETS	Fountoulaki E* 100
73	TEMPORAL DYNAMICS OF GUT MICROBIOTA IN RED SEA BREAM (<i>Pagrus major</i>) FED BLACK SOLDIER FLY (<i>Hermetia illucens</i>) LARVAE MEAL-BASED DIETS FROM DIFFERENT ORIGINS	Oktay O* 101
74	A FUNCTIONAL PALATABILITY ENHANCER FEED ADDITIVE TO IMPROVE GROWTH OF PACIFIC WHITE SHRIMP CULTIVATED AT OPTIMAL OR SUB-OPTIMAL TEMPERATURES	Hoffling FB* 102

Abstract ID	Title	Main author/ page
75	GRINNAQUA – GREEN INNOVATION STRATEGIES FOR ANIMAL HEALTH MANAGEMENT: TOWARDS SUSTAINABLE AQUACULTURE	Costas B* 103
79	UNLOCKING THE LONG-TERM BENEFITS OF <i>Schizochytrium</i> -DERIVED OIL FOR ATLANTIC SALMON (<i>Salmo salar</i>): IMPACT ON GROWTH, WELFARE AND PRODUCT QUALITY	Henriette H* 104
82	COMPLETE REPLACEMENT OF SOY PROTEIN CONCENTRATE BY CANOLA PRODUCTS IN PRACTICAL EXTRUDED FORMULATIONS FOR JUVENILE ATLANTIC SALMON: NUTRITIONAL AND GUT HEALTH RESPONSE	Simon CJ* 105
83	NUTRITIONAL VALUE OF MANGO (<i>Mangifera indica</i> L.) ATAULFO VARIETY BY-PRODUCTS IN DIETS FOR WHITE SHRIMP <i>Litopenaeus vannamei</i> JUVENILES	González-Hernández CE* 106
85	DIETARY KRILL INCLUSION AS NUTRITIONAL SUPPORT FOR ENTEROCYTOZON HEPATOPENAEI (EHP)-CHALLENGED <i>Penaeus vannamei</i> SHRIMP	Burri L* 107
86	SUSTAINABILITY ACTIVITIES IN A HARD-TO-ABATE INDUSTRY – A REAL LIFE EXAMPLE	Burri L* 108
90	MILLENNIAL SALMON – IMPLEMENTATION OF NOVEL INGREDIENTS IN FEEDS FOR A SUSTAINABLE SALMON	Kokkali M* 109
91	MILLENNIAL SALMON – BLACK SOLDIER FLY LARVAE MEAL IN FEEDS TO ATLANTIC SALMON (<i>Salmo salar</i>) IN FRESHWATER AND SEAWATER	Kokkali M* 110
94	HIGH PROTEIN DIETS IMPROVED OXYGEN CARRYING CAPACITY AND GROWTH OF JUVENILE ASIAN SEABASS (<i>Lates calcarifer</i>) AT HIGH TEMPERATURES	Rombenso A* 111
95	IMMUNOMODULATORY EFFECT OF DIETARY METHIONINE ON RAINBOW TROUT FOLLOWING VIRAL HAEMORRHAGIC SEPTICAEMIA VIRUS (VHSV) INFECTION	Vaz M* 112
97	INFLUENCE OF CHRONIC STRESS ON LUMPFISH PLASMA FREE AMINO ACIDS AND IMMUNITY	Lopes T* 113
98	FEEDING REGIME VARIABILITY ON THE AND HEALTH AND FILLET QUALITY OF ATLANTIC SALMON (<i>Salmo salar</i>) FARMED IN NORWAY	Olsen O* 114
102	IMMUNOMODULATORY EFFECTS OF HIGH DIETARY METHIONINE ON EUROPEAN SEABASS SKIN IMMUNE RESPONSE AGAINST <i>Tenacibaculum maritimum</i>	Machado M* 115
104	TWO IN VITRO PLATFORMS PROVIDE A PHYSIOLOGICALLY RELEVANT RANK OF RAINBOW TROUT (<i>Oncorhynchus mykiss</i>) CONTRASTING DIETS	Gandolfi F* 116
107	IMPROVED HEAT STRESS TOLERANCE FOR LARGEMOUTH BASS (<i>Micropterus salmoides</i>) FED A NATURAL ANTIOXIDANT	Hansen AK* 117
108	DIETARY SUPPLEMENTATION OF <i>Bacillus pumilus</i> AND <i>Bacillus subtilis</i> IMPROVES PERFORMANCE OF WHITELEG SHRIMP (<i>Penaeus vannamei</i>) AND RESISTANCE TO OSMOTIC SHOCK & <i>Vibrio parahaemolyticus</i>	Juarez Ceballos M* 118
109	IN SILICO MINING FOR APPETITE REGULATING PEPTIDES IN A FREQUENT FEEDING FISH (<i>Chirostoma estor</i>)	Juárez-Gutiérrez ME* 119

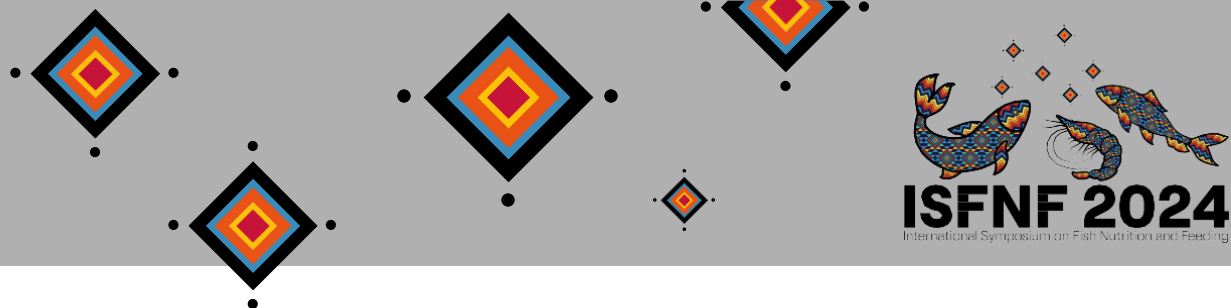


Abstract ID	Title	Main autor/ page
110	DIETARY TRIBUTYRIN SUPPLEMENTATION IN RAINBOW TROUT (<i>Oncorhynchus mykiss</i>) - EFFECTS ON METABOLOME PROFILES	Palma M* 120
111	EFFECT OF DIFFERENT CRUDE PROTEIN AND CRUDE LIPID LEVEL ON GROWTH, FEED CONVERSION IN YELLOWTAIL KINGFISH (<i>Seriola lalandi</i>)	Sharma S* 121
112	ALPHA-LIPOIC ACID SUPPLEMENTATION IN PIKE SILVERSIDE MICRODIETS: NUTRIGENOMIC ANALYSIS REVEAL POTENTIAL MOLECULAR PATHWAYS LEADING TO ENHANCED LARVAE SURVIVAL	Juárez-Gutiérrez ME* 122
115	EVALUATING THE REPLACEMENT OF ESTABLISHED PROTEIN INGREDIENTS IN CHANNEL CATFISH FEEDS WITH DISTILLERS' BY-PRODUCTS: IMPACTS ON GROWTH PERFORMANCE, INTESTINAL HEALTH, AND DISEASE RESISTANCE	Yamamoto FY* 123
116	NAVIGATING THE COMPLEXITY: CHALLENGES AND SOLUTIONS IN IMPLEMENTING SUSTAINABLE RAW MATERIALS IN COMMERCIAL AQUAFEEDS	Zatti KM* 124
117	HOW LOW CAN WE GO? – A RE-EVALUATION OF EUROPEAN SEABASS N-3 LC-PUFA DIETARY REQUIREMENTS	Magalhães S* 125
119	A COMPARATIVE STUDY ON THE BENEFICIAL AND DEGRADING CHARACTERISTICS OF STICKWATER FOR AQUACULTURE DIETS	Julien BB* 126
121	VITAMIN E EXHIBITS A PROTECTIVE EFFECT AGAINST OXIDATIVE STRESS AND IMPROVES IMMUNE RESPONSE INDUCED BY BACTERIA IN HALF-SMOOTH TONGUE SOLE (<i>Cynoglossus semilaevis</i>)	Salini MJ* 127
122	PROTEOMICS AND METABOLOMICS IDENTIFIED PREFERRED ENERGY UTILISATION STRATEGIES IN BLACK TIGER PENAEUS MONODON FED DIFFERENT DIETS	Mendoza-Porras O* 128
123	SOYBEAN MEAL FERMENTATION WITH A PROBIOTIC (<i>Saccharomyces boulardii</i>): EFFECT ON ITS NUTRITIONAL VALUE AND THE PERFORMANCE OF <i>Litopenaeus vannamei</i> WHEN USED TO REPLACE A COMMERCIAL DIET	Valdez-Mireles DA* 129
124	EFFECT OF DIETARY EMULSIFIERS AND OIL SOURCES ON ASTAXANTHIN DIGESTIBILITY AND DEPOSITION IN ATLANTIC SALMON (<i>Salmo salar</i>) AT NORMAL AND ELEVATED REARING TEMPERATURES	Courtot E* 130
125	BENEFITS OF NATURAL CAROTENOIDS DURING CHRONIC THERMAL STRESS IN ATLANTIC SALMON (<i>Salmo salar</i>)	Courtot E* 131
127	IMPROVING THE DIGESTIBILITY OF LIPID SOURCES IN FEEDS FOR ATLANTIC SALMON WITH EMULSIFIERS	Bourke CM* 132
128	EFFECT OF PROTEIN HYDROLYSATES SUPPLEMENTED DIETS ON NILE TILAPIA GROWTH PERFORMANCE	Oviedo-Olvera MV* 133
131	NATURAL INGREDIENTS SUPPORT ATLANTIC SALMON (<i>Salmo salar</i>) IN COPING WITH HANDLING STRESS	Gu J* 134
132	TEMPORAL CHANGES IN TISSUE DISTRIBUTION OF VITAMIN B COMPOUNDS IN RAINBOW TROUT (<i>Oncorhynchus mykiss</i>) FED DIETS FORMULATED WITH MICROALGAE MEAL	Castro-De La Torre M* 135



Abstract ID	Title	Main author/ page
133	DOES IRON SUPPLEMENTATION IMPROVE POST-SMOLT ATLANTIC SALMON (<i>Salmo salar</i>) PERFORMANCE AND HEALTH IN TODAY'S PRACTICAL DIETS?	Silva JMS* 136
135	A NOVEL KRILL MEAL INGREDIENT ENHANCES FEED INTAKE FOLLOWING IMITATED ACUTE HIGH-TEMPERATURE LOUSE TREATMENT STRESS IN ATLANTIC SALMON	Sixten HJ* 137
140	ENHANCING TURBOT (<i>Scophthalmus maximus</i>) BREEDER IMMUNITY THROUGH MACRO- AND MICROALGAE SUPPLEMENTED DIET	Ramos-Pinto L* 138
145	EFFECTIVENESS OF FUNCTIONAL FEED INGREDIENTS TO ENHANCE HEALTH IN FISH AFFECTED BY COMPLEX GILL DISEASE	Vitale M* 139
148	MODELLING OXYGEN CONSUMPTION IN POST-LARVAL SENEGALESE SOLE FED DIETS WITH DIFFERENT PROTEIN AND ENERGY LEVELS	Conceição LEC* 140
149	POTENTIAL USE OF SPENT BREWER'S YEAST AS A SUSTAINABLE PROTEIN SOURCE FOR ATLANTIC SALMON (<i>Salmo salar</i>) AQUAFEEDS	Hernández AJ* 141
150	CLUSTER MOBILIZATION FOR COMMERCIALISATION OF NEW FEED INGREDIENTS	Johansen MJ 142
151	OPTIMIZING FEED EFFICIENCY AND PROTEIN RETENTION IN RAINBOW TROUT (<i>Oncorhynchus mykiss</i>) THROUGH SHORT FASTING PULSES	Hernández AJ* 143
152	ENHANCING RESILIENCE IN GILTHEAD SEABREAM JUVENILES THROUGH DIETARY MICROALGAE SUPPLEMENTATION	Teodósio R* 144
154	BACTERIAL SINGLE CELL PROTEINS TO NOURISH TRADITIONAL AND EMERGING FISH SPECIES: SPOTLIGHT ON GILTHEAD SEA BREAM AND GREY MULLET	Parma L* 145
159	A HEMP BY-PRODUCT CONCENTRATE AS A PROTEIN SOURCE FOR ATLANTIC SALMON <i>Salmo salar</i>	Betancor MB* 146
161	THE UNDERLYING BENEFITS OF IMPROVED FARM PERFORMANCE USING NOVAQPRO® MICROBIAL BIOMASS FOR TIGER SHRIMP <i>Penaeus monodon</i>	Wade NM* 147
163	SCALLOP BY-PRODUCTS (<i>Argopecten purpuratus</i>), BAKER'S YEAST (<i>Saccharomyces cerevisiae</i>) AND BLACK SOLDIER FLY (<i>Hermetia. illucens</i>) AS PROTEIN SOURCES IN FEED FOR YELLOWTAIL KINGFISH (<i>Seriola lalandi</i>) JUVENILES: NUTRITIONAL AND PHYSIOLOGICAL RESPONSES	Serrano E* 148
166	DEUTERATED WATER STABLE ISOTOPE ENRICHMENT AND METABOLIC FLUX ANALYSIS TO TRACE NUTRIENT UTILISATION IN CRUSTACEANS	Wade NM* 149
168	IGNITION – IMPROVING GREEN INNOVATION FOR THE BLUE REVOLUTION: NEWS TOOLS AND OPPORTUNITIES FOR A MORE SUSTAINABLE ANIMAL FARMING	Costas B* 150

Abstract ID	Title	Main author/ page
170	DIGESTIBILITY AND BIOAVAILABILITY OF AMINO ACIDS OF MEAT AND BONE MEALS TO NILE TILAPIA (<i>Oreochromis niloticus</i>)	Bureau DP* 151
171	DISTAL GUT TRANSCRIPTOMIC PROFILING IN <i>Totoaba macdonaldi</i> JUVENILES FED DIFFERENT LEVELS OF SOY PROTEIN CONCENTRATE	Cárdenas-López GA* 152
173	EFFECT OF A PLANT-PROTEIN BASED DIET ON GROWTH PERFORMANCE OF JUVENILE RAINBOW TROUT OBTAINED FROM TWO DIFFERENT CENTERS OF AQUATIC PRODUCTION IN MEXICO	García-Medel DI* 153
174	EFFECT OF DIETARY INCORPORATION OF ALFALFA PROTEIN CONCENTRATE (<i>Medicago sativa</i>) ON THE GROWTH PERFORMANCE AND LIVER HEALTH OF ATLANTIC SALMON (<i>Salmo salar</i>) FRY	Serrano E* 154
175	<i>IN VITRO</i> DIGESTION AND FREE AMINO ACIDS OF VARIOUS PLANT AND ANIMAL PROTEIN SOURCES USING ENZYMATIC EXTRACTS FROM PACIFIC BLUEFIN TUNA (<i>Thunnus orientalis</i>)	Barreto-Curiel F* 155
176	AGAVIN PROMOTES BENEFICIAL MICROBES IN THE SHRIMP MICROBIOTA	Ochoa-Leyva A* 156
178	GREEN LIVER SYNDROME IN <i>Totoaba macdonaldi</i> : A TRANSCRIPTOMIC APPROACH	Galaviz-Espinoza MA* 157
179	DIGESTIBILITY OF POULTRY BY-PRODUCT MEAL AND PRODUCTIVE RESPONSE IN REPLACEMENT OF FISH MEAL FOR RAINBOW TROUT (<i>Oncorhynchus mykiss</i>)	Yance BA* 158
181	EMERGING PROTEIN-RICH INGREDIENTS FOR AQUACULTURE - THE SEARCH FOR PROTEIN-RICH ALTERNATIVES TO EXPAND THE AQUAFEED INGREDIENT BASKET	Chen L* 159
182	EFFECTS OF GLUCOSE OXIDASE AS A GROWTH PROMOTER AND CONTROL OF <i>Vibrio parahaemolyticus</i> IN <i>Litopenaeus vannamei</i>	Cesareo N* 160
183	NON-SPECIFIC PATHOGEN RESISTANCE IN RAINBOW TROUT SELECTED FOR ENHANCED UTILIZATION OF PLANT-BASED FEEDS	Overturf K* 161
185	THE IMPACT OF MINERAL SUPPLEMENTATION LEVEL AND SOURCE ON ATLANTIC SALMON PERFORMANCE, WELFARE, AND QUALITY IN COMMERCIAL PRODUCTION ALONG THE NORWEGIAN COASTLINE	Kokkali M* 162
186	EFFECTS OF FISH MEAL REPLACEMENT WITH INSECT MEALS (<i>Hermetia illucens</i> AND <i>Acheta domesticus</i>) ON GROWTH PERFORMANCE, DIGESTIBILITY, DIGESTIVE ENZYME ACTIVITY, AND FATTY ACID PROFILE OF JUVENILE <i>Totoaba macdonaldi</i>	Carvajal-Soriano KE* 163
187	APPARENT DIGESTIBILITY OF FEEDSTUFFS AT DIFFERENT DIETARY LEVELS AND THE EFFECT ON MICROBIOTA OF <i>Litopenaeus vannamei</i>	Civera-Cerecedo R* 164
188	GLYCOGENIC HEPATOPATHY IN A PRIMITIVE VERTEBRATE MODEL: THE INDUCTIVE EFFECT OF HIGH-CARBOHYDRATE DIET AND THE ALLEVIATING ROLE OF BETAINE	Wang Q* 165
190	ENHANCING SPAWNING AND LARVAL QUALITY OF <i>Litopenaeus vannamei</i> WITH <i>Ulva clathrata</i> BROODSTOCK DIET ENRICHMENT	Ricque-Marie D* 166

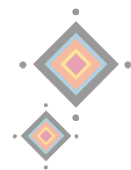


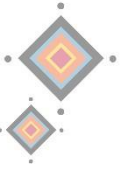
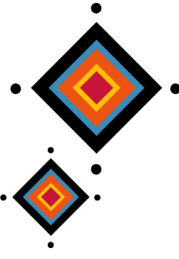
Abstract ID	Title	Main autor/ page
191	EFFECTS OF PROTEASE SUPPLEMENT ON GROWTH PERFORMANCE AND FEED EFFICIENCY OF STRIPED CATFISH (<i>Pangasianodon hypophthalmus</i>) IN A CONTEXT OF PARTIALLY REPLACED SOYBEAN MEAL BY CANOLA MEAL	Servin AK* 167
192	EFFECT OF TEMPERATURE DURING THE LARVAL-JUVENILE TRANSITION OF <i>Totoaba macdonaldi</i>	Hernandez MAH* 168
193	IMPROVING STRESS RESPONSE DURING MARINE FISH LARVAL REARING THROUGH DIETARY SUPPLEMENTATION: EPPO AND S2AQUACOLAB EXPERIMENTAL AND ANALYTICAL CAPACITY	Pousão-Ferreira P* 169
194	DETERMINATION OF THE PROTEIN VALUE OF NOVEL POULTRY MEAL INGREDIENTS FOR RAINBOW TROUT (<i>Oncorhynchus mykiss</i>)	Sealey WM* 170
195	FEED UTILIZATION, STRESS RESPONSE AND BIOLOGICAL PERFORMANCE OF STRIPED BASS <i>Morone saxatilis</i> CULTURED IN SEAWATER: EFFECT OF DENSITY AND TANK COLOR	Campos A* 171
196	EFFECTS OF BILE ACIDS AND ORGANIC ACID (SODIUM BUTYRATE) ON GROWTH PERFORMANCE AND GUT HEALTH OF RAINBOW TROUT	Kumar V* 172
197	IDEAL LEVEL OF INCLUSION OF BILE ACIDS IN DIETS FOR JUVENILE NILE TILAPIA	Dehao H* 173
198	ASSESSMENT OF DIETARY FERMENTED AGAR BY-PRODUCT ON EUROPEAN SEABASS INTESTINAL HEALTH: OXIDATIVE STRESS, IMMUNE RESPONSE, AND GUT MICROBIOTA	Martin N* 174
199	NEXPRO: FERMENTED CORN PROTEIN AS A NOVEL INGREDIENT FOR EUROPEAN SEABASS DIETS	Martin N* 175
200	CO-FERMENTATION OF GELIDIUM AGAR BY-PRODUCT AND SUNFLOWER MEAL AS A NOVEL FEED INGREDIENT FOR EUROPEAN SEABASS (<i>Dicentrarchus labrax</i>)	Fontinha F* 176
201	EVALUATION OF POET CFP AS A NOVEL INGREDIENT TO FULLY REPLACE CORN GLUTEN AND SOYBEAN MEAL IN EUROPEAN SEA BASS (<i>Dicentrarchus labrax</i>) AQUAFEEDS	Vieira L* 177
202	ANTIOXIDANT POTENTIAL OF MACROALGAE EXTRACTS: A COMPARATIVE ANALYSIS OF MACROALGAE SPECIES, PRE-TREATMENT AND EXTRACTION METHODS	Fontinha F* 178



Symposium Program

	Monday May 27	Tuesday May 28	Wednesday May 29	Thursday May 30	Friday May 31
Time		<i>Ingredients Day</i>	<i>Requirements Day</i>	<i>Health Day</i>	<i>Additives Day</i>
08:00					
08:20		Opening Ceremony			
08:40		<i>Keynote 1 - Ingredients</i>	<i>Keynote 2 - Requirements</i>	<i>Keynote 3 - Applied</i>	<i>Keynote 4 - Additives</i>
09:00		Luisa Valente	Aires Oiva-Teles	Lukas Manomaitis	Ester Santigosa
		<i>Protein Sources</i>	<i>Nutrients and Functionality</i>	<i>Health</i>	<i>Additives</i>
09:40		2. Zatti 88	2. Machado 103	2. Rocha 87	2. Giudicelli 18
10:00		3. Mensah 78	3. Azeredo 141	3. Wacyk 155	3. Morales-Lange 77
10:20		4. Øverland 45	4. Deng 81	4. Suehs 100	4. Morais 23
10:40		5. Romano 17	5. Garnica-Gómez 22	5. Salah 157	5. Montero R 153
11:00		6. Colombo 146	6. Bitan 160	6. Standen 139	6. Rider 76
11:20	REGISTRATION & SETUP	<i>Protein Sources</i>	<i>Comparative Nutrition</i>	<i>Nutritional Frontiers</i>	<i>Additives</i>
11:40					
12:00		7. Davis 12	7. Bou 53	7. Bureau 169	7. Cornejo-Granados 177
12:20		8. Bonaldo 172	8. Liu 105	8. Chacon 130	8. Yang 65
12:40		9. Kaur 28	9. Yeap 64	9. Truong 48	9. Hoffling 106
13:00		10. Abrahamsen 72	10. Rombenso 92	10. Alaa 11	10. Kortner 99
13:20		11. Hooft 144	11. Sixten 142	11. Kumar 34	11. Krogdahl 101
13:40		12. Satoh 80	12. Nuez-Ortín 24	12. Jafarzadeh 89	12. Nunes 37
14:00					
14:20		<i>Lipid Sources</i>	<i>Environment and Nutrition</i>		<i>Additives</i>
14:40					
15:00					
15:20		13. Kabeya 136	13. Simon 164		13. Pereira 9
15:40		14. Broughton 167	14. Courtot 126		14. Salini 120
16:00		15. Haga 129	15. Mendoza-Porras 118		15. Djordjevic 36
16:20	REGISTRATION & SETUP	16. Karalazos 114	16. Peixoto 57		16. Moffitt 156
16:40		17. Betancor 158	17. Py 189		17. Vitale 147
17:00		18. Parrish 143	18. Fracalossi 30	Site Seeing and Tours	18. Garcia 165
17:20					Awards and Closing Ceremony
17:40					
18:00					
18:20	POSTER SESSION 1	POSTER SESSION 2	POSTER SESSION 3		
18:40					
19:00					
19:20					
19:40					
20:00					
20:20	WELCOME RECEPTION				SYMPOSIUM DINNER
20:40					
21:00					
21:20					
21:40					
22:00					





ISFNF 2024

International Symposium on Fish Nutrition and Feeding

